

CLAIMS

1. An ignition coil comprising;
a housing;
a rod-shaped center core arranged
5 substantially at the center within the housing;
a thermal stress relaxing member covering
the outer circumferential surface of the center core;
a cylindrical spool arranged on the outer
circumferential side of the thermal stress relaxing
10 member with a gap in between; and
a resin insulating material with which the
gap is filled and which hardens; wherein
the thermal stress relaxing member is
wound around the center core; and
15 the thickness of the thermal stress
relaxing member is set to a thickness so that the thermal
stress, which is caused by the thermal deformation of the
center core and is applied to the resin insulating
material, is reduced and reaches a saturation value
20 thereof.
2. An ignition coil, as set forth in claim 1,
wherein the center core is a laminated core made up of
magnetic plates stacked in the radial direction.
3. An ignition coil, as set forth in claim 1,
25 wherein the thermal stress relaxing member has a linear
expansion coefficient of $25 \times 10^{-6}^{\circ}\text{C}$ or lower and the
thickness thereof is set to 0.1 mm or greater.
4. An ignition coil, as set forth in claim 1,
wherein the thermal stress relaxing member is made of
30 poly ethylene terephthalate, polyester, glass fabrics,
polyamide, fluororesin or vinyl chloride and the
thickness of the thermal stress relaxing member is set to
0.1 mm or greater.